

Long Island Botanical Society

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The Botanical Work of Fanny Mulford on Western Long Island, New York

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President, Long Island Botanical Society

Six months ago I first learned of an obscure report of the fragrant ladies'-tresses orchid (*Spiranthes odorata*) from Long Island (Sheviak 1982). Being a local botanist I should have known about it but the report had eluded me for more than 30 years. What really caught my eye in the report was the name of the orchid collector: "F. A. Mulford."

Fanny Mulford first appeared on my botanical radar screen in the early 1990s when I was researching native orchid collections from Long Island. From 1895 to 1918, Fanny collected slightly more than 1000 vouchers of vascular plants from western Long Island including orchids, violets, ferns, and many species of rare plants (Fig. 1). Her botanical contributions inspired me to write *Fanny Mulford's orchid collections from the late 1890's* for the Newsletter of the Long Island Botanical Society (Lamont 1995).

Who was Fanny Mulford?

Fanny Augusta Mulford was born 20 September 1855 in Nevada City, California (Table 1). Her parents were Charles William Mulford (5 February 1827–7 February 1912) and Deborah Wickes (29 March 1828–3 April 1909) of New York. Charles Mulford and his

friend from law school Niles Searls (future Chief Justice of California) joined the California Gold Rush. Traveling with the Pioneer Line wagon train, they arrived in October of 1849 and soon made a fortune. Charles and Niles returned to New York in 1853 to marry brides from Rensselaerville, and then both couples returned to Nevada City where Fanny

was born two years later. The Mulford family returned to New York, and on 20 July 1859 Deborah gave birth to Fanny's twin sisters Helen and Harriet. Helen died aged 2 on 11 February 1862. In 1866 the family settled on Fulton Avenue, Hempstead, Long Island. The Mulford homestead was named "Langsyne" and extended north to the border of Garden City. Fanny and Harriet lived together and never married. In 1928, the Mulford property in Hempstead was sold and Fanny moved to Garden City and later to Great Neck, where she died on 17 October 1939.

The Mulfords in America are believed to have come from Devonshire, England and were among the earliest settlers of Long Island. Two brothers, John and William, arrived in Salem, Massachusetts and then moved on to Long Island in the 1640s. John Mulford was Fanny's fifth great-grandfather.

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Figure 1. Holotype of Mulford's violet (*Viola mulfordae* Pollard), collected by and named for Fanny Mulford. <http://collections.nmnh.si.edu/search/botany/?bc=00114581>

Long Island Botanical Society

Founded: 1986 • Incorporated: 1989

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

Visit the Society's Web site
www.libotanical.org

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Society News

Elections. At the November 2015 meeting, LIBS members elected the following slate of officers to serve a 2-year term: President--Eric Lamont, Vice-President--Andrew Greller, Treasurer--Carol Johnston, Recording Secretary--Barbara Conolly, Corresponding Secretary--Rich Kelly.

Members' Night. At the 8 December 2015 LIBS meeting, Marian Hubbard read a poem about the twining tendrils of a honeysuckle and a bindweed from "At the Drop of a Hat;" Lois Lindberg presented highlights of this past summer's effort to eradicate hardy kiwi (*Actinidia arguta*) from Coffin Woods, Nassau County (a project of the North Shore Wildlife Sanctuary, partnered with LIBS and Portledge School); and Andy Greller shared some of his experiences learning lichens at a workshop in Maine and on a field trip in western Canada.

Published in Newsday on Nov. 20, 2015 - PROLY - Elisa "Zu," 97, a retired physical education teacher with the Westbury Public Schools, died peacefully at home in Boca Raton, FL on Wednesday on November 11, 2015. Originally from Jamaica, NY, Hempstead, NY and Glen Cove, NY, she was a dedicated member of the Long Island Botanical Society, North Shore Audubon Society, Inc., Nature Conservancy Long Island Chapter, and the Long Island Greenbelt Trail Conference, Inc. Zu was also a devoted friend to many as well as a long-time volunteer at the Glen Cove Soup Kitchen "The Inn" (North Shore Interfaith Nutrition Network) and the North Shore Sheltering Program. She is survived by her sister, Louise Smith, and sister-in-law, Ruth Proly, 9 nieces and nephews, 20 grand nieces and grand nephews and 12 great grand nieces and great grand nephews. Zu was an extraordinary sister, aunt, and world traveler who visited 62 countries in her lifetime, and loved sharing the knowledge from all her adventures with all of us. A celebration memorial service will be held on January 16, 2016 at the First Presbyterian Church of Glen Cove located at 7 North Lane, Glen Cove, NY at 12 noon. In lieu of flowers memorial contributions may be made to the Long Island Greenbelt Trail Conference, Inc. or the Nature Conservancy Long Island Chapter, 250 Lawrence Hill Road, Cold Spring Harbor, NY 11724.

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Annual Membership is \$20 payable to:

Long Island Botanical Society

Mail your dues to:

Carol Johnston, LIBS Treasurer

347 Duck Pond Road

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NOTE: Membership renewals are due in January

SPECIAL NOTICE: If you received our renewal notice in the mail, please be aware that the enclosed envelope features a different address. You should use the address printed above, if possible.

(Fanny Mulford continued from cover)



Figure 2. Photograph entitled "Fanny A. Mulford house, Fulton Avenue, Hempstead, New York. Arbor Seat." Photograph by Frances B. Johnston¹, ca. 1916 (glass lantern slide, hand-colored; 3.25 x 4 in.; on slide (handwritten): "M" and "Mulford, Miss Fanny"). Repository: Library of Congress, Prints and Photographs Division, Washington, D.C.

Fanny Mulford was an amateur botanist and collected many rare and noteworthy plants from western Long Island (Table 2). During the first three decades of the 20th century she was affiliated with The New York Botanical Garden, the Brooklyn Botanic Garden, and the Torrey Botanical Club. Although Fanny did not publish botanical papers in scientific journals, she collaborated with eminent botanists of her time and her plant collections continue to be important contributions to our understanding of Long Island's flora.

Fanny was a charter member of the Wild Flower Preservation Society of America and collaborated with its founder Elizabeth Britton². The two women formed a professional and personal relationship as revealed in their correspondence filed in the archives of the LuEsther T. Mertz Library at The New York Botanical Garden. In a handwritten letter dated 21 April 1920, Fanny wrote: "My Dear Elizabeth, I hope you have landed safely home by this time . . ." She went on to discuss some details of an upcoming wildflower exhibit at The New

(Continued on next page)

1 Frances "Fannie" Benjamin Johnston (1864–1952) was one of the earliest American female photographers and photojournalists. She photographed events such as world's fairs and peace-treaty signings and took the last portrait of President William McKinley just before his assassination. She opened a studio in New York City in 1913. Theodore Roosevelt wrote to Admiral George Dewey in 1899 "Miss Johnston is a lady, and whom I personally know & can vouch for; she does good work, and any promise she makes she will keep."

2 Elizabeth Gertrude Britton (née Knight, 1858–1934) was an American botanist, bryologist, and educator. She and her husband, Nathaniel Lord Britton, played a significant role in the creation of The New York Botanical Garden. She was an activist for the protection of wildflowers and made major contributions to the study of mosses, publishing 170 papers in that field.

(Fanny Mulford continued from page 3)

York Botanical Garden and ended by noting, "I have a fresh little clump of *Sedum Nevii* sent from Atlanta, Ga. Do you want it for your rock-garden? Affectionately, Fanny." On 4 May 1920, Elizabeth replied, "My dear Fanny: We are just back from Trinidad and your letter of the 21st is here. I think that June will be a very good month to exhibit Miss Vicks' wild flowers and I should think if they are in Boston they had better be shipped here direct. Thank you for the offer of the clump of *Sedum Nevii*. I hope you have taken care of it and sometime will let us have a portion of it. Can you and Hattie come over Thursday for our Spring Inspection? I will send you a card."

Fanny Mulford's interest in the flora of Long Island coincided with the floristic work of botanist Norman Taylor at The New York Botanical Garden (from 1904 to 1911) and at the Brooklyn Botanic Garden (from 1911 to 1929). In Taylor's classic 1915 *Flora of the Vicinity of New York*, Fanny Mulford's contributions were acknowledged along with those of 15 prominent men of science at the time, including Nathaniel Lord Britton of The New York Botanical Garden and Merritt Lyndon Fernald of Harvard University.

Fanny was a keen gardener and she retained landscape architect Ruth Bramley Dean to design a formal flower garden at Langsyne. Watters (2012) noted: "In her suburban garden, Mulford planted domesticated flowers, but her avocation was collecting and recording native plants around Hempstead Lake."

Around 1916, Fanny's flower garden was photographed by Frances B. Johnston, one of the first American women to achieve prominence as a photographer. One of Johnston's photographs, entitled "Fanny A. Mulford house, Fulton Avenue, Hempstead, New York. Arbor Seat" (Fig. 2), was featured in *Gardens for a Beautiful America, 1895-1935* (Watters 2012) and forms part of the "Garden and Historic House" series in the Frances Benjamin Johnston collection of the U.S. Library of Congress.

In addition to Fanny Mulford's botanical affiliations, she was one of the founders of Hempstead Library in 1889 and served as president from 1913 to 1931. She was an active member of St. George's Episcopal Church in Hempstead and was recognized as a leading citizen of Hempstead village (The Hempstead Sentinel 1939).

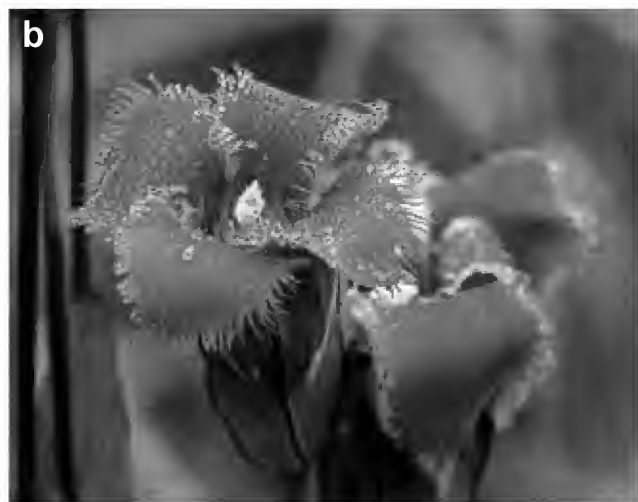
Table 1.

Summary of important events in Fanny Mulford's life, highlighting her botanical achievements.

1855	Born 20 September in Nevada City, California.
1859	Birth of Fanny's twin sisters Helen and Harriet in New York.
1862	Death of sister Helen.
1866	Mulford family settles in Hempstead, Long Island, New York (residence for 42 yrs).
1889	Co-founder, with sister Harriet et al., of Hempstead Library.
1895	First collections of plants from western Long Island (continuing regularly until 1905, and intermittently thereafter).
1896	Joined Torrey Botanical Club (member for 40 yrs).
1902	Charter Member, Wild Flower Preservation Society of America (beginning of 25+ yr collaboration with founder Elizabeth Britton).
1902	Mulford's violet (<i>Viola mulfordae</i> , Fig. 1) named in honor of Fanny Mulford.
1902-03	Botanical "Investigator" at The New York Botanical Garden.
ca. 1904	Collaboration begins with Norman Taylor on the study of Long Island's flora.
1906 & 07	Field trip leader for the Torrey Botanical Club.
1915	Acknowledged for contributions to <i>Flora of the vicinity of New York</i> .
ca. 1916	Collaboration with Frances B. Johnston, American photographer and photojournalist.
1918	Last plant collection, with sister Harriet.
1928	Mulford property in Hempstead sold.
1936	Resigned from membership in Torrey Botanical Club.
1939	Died 17 October at Great Neck, Long Island.



Figure 3. *Gentianopsis crinita* (fringed gentian). Towns Co., Georgia. a) unfurled flowers, Oct. 2013; b) close-up of flower, Oct. 2015; c) inflorescence, Oct. 2013. [Photos by James Fowler.]



Fanny Mulford's plant collections

In the world of field botany there are two basic types of plant collectors, the “generalist” and the “specialist.” The generalist collects both common and uncommon plant species and sometimes attempts to collect every species from a certain geographic region; the specialist concentrates primarily on collecting specific kinds of plants. Fanny Mulford did not collect common plant species; rather, she was a specialist and

focused on collecting rare and noteworthy native vascular plants from western Long Island.

Fanny Mulford's plant specimens reveal her primary collecting localities (Table 2). Almost half of her collections were from the vicinity of Hempstead, including the Hempstead Plains, Hempstead Reservoir, and Cherry Valley. Other common collecting sites included the vicinity of Garden City, Meadow Brook, and Merrick. In 1901, she made her only known collecting trip to Manhasset in northern Nassau County and collected one species, the fringed gentian (*Gentianopsis crinita*; Fig. 3). She rarely collected in Queens and Suffolk counties but did make a few trips for noteworthy species (Table 2). In 1896 she collected adder's tongue fern (*Ophioglossum pusillum*) from Queens County and in 1899 she collected a glasswort (*Salicornia depressa*) from central Suffolk County.

Fanny's method of collecting plants reveals her dedication to scientific rigor and attention to details. Her specimens were carefully selected and preserved. She had standardized herbarium labels (Fig. 4) printed under the heading *Plants of Long Island Collected and Presented by Fanny A. Mulford of Hempstead*. Fanny eventually donated her personal herbarium to the Brooklyn Botanic Garden, probably during the time of her collaboration with Norman Taylor.

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(Fanny Mulford continued from page 5)

Fanny spent a lot of time in the field studying the flora of the Hempstead Plains grassland. Once encompassing 50 square miles in western Long Island, today the grassland has been reduced to a single remnant which is currently listed as a “globally rare community” (New York Natural Heritage Program 2013).

Among Fanny’s many collections from the Hempstead Plains was an unusual violet first collected on 13 May 1902. The specimen was sent to the Smithsonian Institution for identification, and botanist Charles Pollard described it as a new species: *Viola mulfordae*, Mulford’s violet (Fig. 1), named in honor of Fanny Mulford. Pollard (1902) wrote

“The species belongs to the coastal plain region, its affinities being with *V. Brittoniana*, with which it is found growing. Miss Mulford was the first to detect the obvious differences in both flowers and foliage, and after a full season’s observation of both plants in the field concluded that they should not be referred to the same species. In recognition of her courtesy in contributing material and the result of her investigations I take pleasure in naming the plant as above [*Viola mulfordae*].”

In 1906, Fanny led a field trip to the Hempstead Plains for the Torrey Botanical Club. The following report was published in volume 6 of the club’s journal, *Torrey*: “The excursion of September 1 was to Hempstead, Long Island, with Miss Fanny A. Mulford as guide.” . . . “The most interesting plant of the Hempstead Plains was perhaps *Gerardia decemloba* Greene, with which *Lobelia Nuttallii* was growing. *Eupatorium hyssopifolium*, *Viola notabilis*, *V. Brittoniana* and *V. Mulfordae* with cleistogamous flowers were other plants of special interest that were collected.” The following spring, on 18 May 1907, Fanny led another field trip (“Special excursion for violets”) to the Hempstead Plains for the Torrey club, but no report was published.

Ezra Brainerd (1906) first suggested that *Viola mulfordae* was of hybrid origin, with *Viola fimbriatula* and *V. septemloba* as parent species. In 1924, Brainerd revised his assessment and concluded that *V. fimbriatula* and *V. brittoniana* were the true parent species. Brainerd (1924) wrote: “Through the kindness of Miss Mulford I received, September, 1904, 10 or 12 plants of her violet, which were under observation in the garden during the season of 1905. They had the usual vigorous growth of a hybrid” . . . “Mixed with the living plants received in 1904 were five plants of *V. Brittoniana* and one of *V. fimbriatula*, showing that the three forms, the hybrid and its suspected parents, were growing near to each other.”

In 2011, Arthur Haines agreed with Brainerd’s conclusions and noted, “*Viola ×mulfordae* Pollard is a very rare violet hybrid.” In recent years, some debate has arisen in the botanical world concerning the proper spelling of the specific epithet of Mulford’s violet. Some taxonomists argue that the correct spelling should be “*Viola mulfordiae*” (notice the addition of the letter “i” in the species name).

Fanny also studied and collected ferns. She collected 21 fern species from western Long Island. The wood ferns (*Dryopteris*) are a complex group of species that are sometimes difficult to identify; and in the same manner that Fanny had previously focused her attention on violets, she applied her skills to the study of wood ferns.

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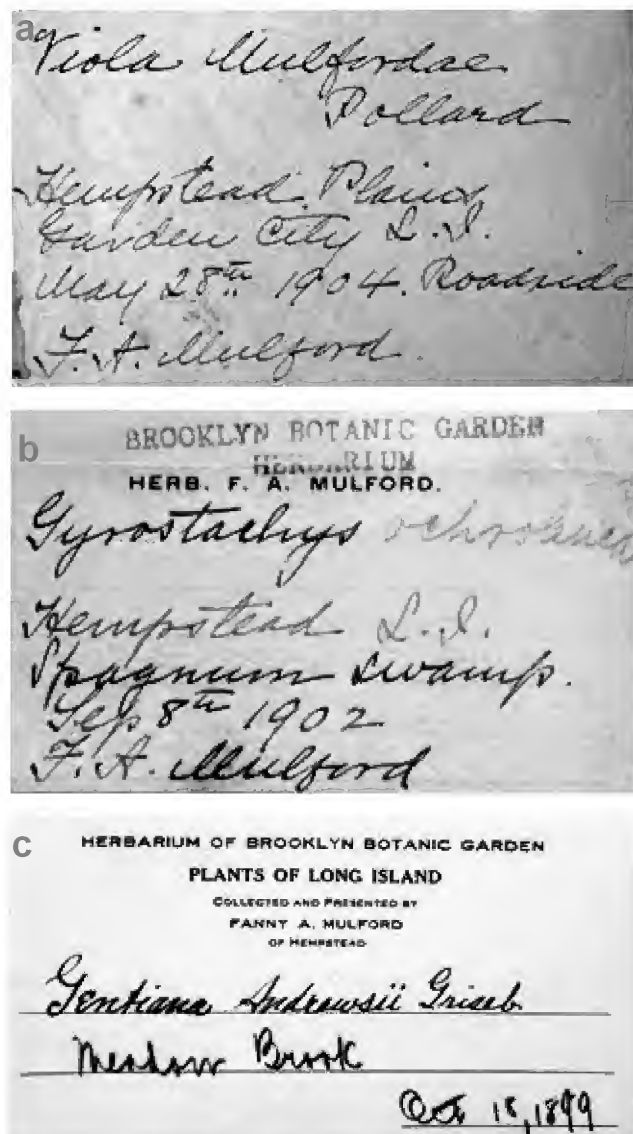


Figure 4. Handwritten and signed herbarium labels of Fanny Mulford a) from a collection of *Viola mulfordae* at NY; b) from a collection of *Spiranthes* (*Gyrostachys*) at BKL; c) from a collection of *Gentiana* at BKL. Note Fanny’s distinctive swirl of the upper case letter “G”.

Table 2.

State-listed rare plants collected by Fanny Mulford from western Long Island. All vouchers except one are at BKL, currently on long-term loan to NY. The voucher of *Isotria medeoloides* is at NY. Nomenclature follows the New York Flora Atlas (Weldy, Werier, and Nelson 2015). Common name, state listing and S-rank follow Young (2010).

Scientific Name	Common Name	Year	Locality	State Listing, S-rank
<i>Aletris farinosa</i>	stargrass	1899	Hempstead	Threatened, S2
<i>Amianthium muscaetoxicum</i>	fly-poison	1898	Valley Stream	Extirpated, SX
<i>Arethusa bulbosa</i>	dragon's mouth orchid	1897	Meadow Brook	Threatened, S2
<i>Asclepias variegata</i>	white milkweed	1902	Hempstead	Endangered, S1
<i>Asclepias verticillata</i>	whorled milkweed	1895	Hempstead	Rare, S3
<i>Bartonia paniculata</i>	screw-stem	1909	Merrick	Endangered, S1
<i>Crocianthemum dumosum</i>	bushy rockrose	1900	Garden City	Threatened, S2
<i>Crocianthemum propinquum</i>	early frostweed	1900	Meadow Brook	Threatened, S2S3
<i>Cuscuta polygonorum</i>	smartweed dodder	1899	Norwood	Endangered, S1
<i>Cyperus echinatus</i>	globose flatsedge	1900	Hempstead	Endangered, S1
<i>Desmodium ciliare</i>	little-leaf tick-trefoil	1897	Norwood	Threatened, S2S3
<i>Desmodium obtusum</i>	stiff tick-trefoil	1897	Norwood	Endangered, S1
<i>Dryopteris celsa</i> × <i>cristata</i>	hybrid wood-fern	1906	Great Neck	Historical?, SH?
<i>Dryopteris ×separabilis</i>	glandular log-fern	1905	Hempstead	Historical?, SH?
<i>Eupatorium pubescens</i>	serrate round-leaf boneset	1898	Hempstead	Endangered, S1
<i>Euphorbia ipecacuanhae</i>	American ipecac	1902	Rockville Centre	Endangered, S1
<i>Eurybia spectabilis</i>	showy aster	1906	Lakeview	Threatened, S2
<i>Gentiana saponaria</i>	soapwort gentian	1899	Meadow Brook	Endangered, S1
<i>Helianthus angustifolius</i>	swamp sunflower	1899	Meadow Brook	Threatened, S2
<i>Hypericum adpressum</i>	creeping St. John's-wort	1899	Meadow Brook	Threatened, S2
<i>Hypericum hypericoides</i> ssp. <i>multicaule</i>	St. Andrew's cross	1901	Merrick	Endangered, S1
<i>Iris prismatica</i>	slender blue flag	1897	East Rockaway	Threatened, S2
<i>Isotria medeoloides</i>	small whorled pogonia	1918	Hempstead	Endangered, S1
<i>Lechea racemulosa</i>	Illinois pinweed	1900	Hempstead	Rare, S3
<i>Lespedeza angustifolia</i>	narrow-leaved bush-clover	1901	Hempstead	Threatened, S2
<i>Lespedeza repens</i>	trailing bush-clover	1899	Hempstead	Rare, S3
<i>Linum intercursum</i>	sandplain wild flax	1897	Garden City	Threatened, S2
<i>Linum medium</i> var. <i>texanum</i>	southern yellow flax	1900	Meadow Brook	Threatened, S2
<i>Linum striatum</i>	stiff yellow flax	1899	Merrick	Rare, S3
<i>Liparis liliifolia</i>	large twayblade	1896	Lakeville	Endangered, S1
<i>Lobelia nuttallii</i>	Nuttall's lobelia	1897	Meadow Brook	Rare, S3
<i>Oxypolis rigidior</i>	stiff cowbane	1909	Merrick	Historical, SH
<i>Platanthera ciliaris</i>	orange fringed orchid	1896	East Meadow	Endangered, S1
<i>Ptilimnium capillaceum</i>	mock bishop's-weed	1899	Amityville	Rare, S3
<i>Sabatia stellaris</i>	sea-pink	1896	Hempstead Bay	Threatened, S2
<i>Salicornia bigelovii</i>	dwarf glasswort	1904	Freeport	Threatened, S2S3
<i>Scutellaria parvula</i> var. <i>missouriensis</i>	Leonard's skullcap	1907	Hempstead	Historical?, SH?
<i>Silene caroliniana</i> ssp. <i>pennsylvanica</i>	wild pink	1896	Hempstead	Threatened, S2
<i>Spiranthes vernalis</i>	spring ladies'-tresses	1898	Meadow Brook	Endangered, S1
<i>Stachys byssopifolia</i>	rough hedge-nettle	1900	Garden City	Threatened, S2
<i>Strophostyles umbellata</i>	pink wild bean	1900	Hempstead	Endangered, S1
<i>Symphyotrichum subulatum</i>	saltmarsh aster	1904	Freeport	Threatened, S2
<i>Symphyotrichum tenuifolium</i>	slender saltmarsh aster	1902	Freeport	Rare, S3
<i>Utricularia geminiscapa</i>	hiddenfruit bladderwort	1899	Meadow Brook	Rare, S3
<i>Utricularia radiata</i>	small floating bladderwort	1895	Hempstead	Threatened, S2
<i>Utricularia striata</i>	fibrous bladderwort	1896	Meadow Brook	Threatened, S2

(Fanny Mulford continued from page 6)

From 1905 to 1907, Fanny collected a series of seven wood fern specimens including three hybrids whose identities would remain a mystery for 85 years. Most of the collections were from the wet, seepy woods bordering Hempstead Reservoir and from Cedar Swamp near Merrick; the species collected included crested wood fern (*Dryopteris cristata*), evergreen wood fern (*D. intermedia*), spinulose wood fern (*D. carthusiana*), and marginal wood fern (*D. marginalis*). Fanny correctly identified the four species but was unable to apply names to three of her wood fern collections.

From 1989 to 1990, fern experts John T. Mickel, Joseph M. Beitel, and Warren H. Wagner, Jr. conducted a systematic study known as the "New York Pteridoflora" project. They examined every known fern collection from New York, including Fanny Mulford's three unidentified wood fern specimens. One specimen was identified as glandular log fern (*Dryopteris* × *separabilis*, Fig. 5), a hybrid with log fern (*Dryopteris celsa*) and evergreen wood fern as parents. Another was identified as a hybrid between log fern and crested wood fern. The occurrence of these two hybrid wood ferns on Long Island remains a mystery because log fern has never been collected or reported from Long Island; the closest known population occurs on Staten Island. The third specimen was identified as Boot's wood fern (*Dryopteris* × *bootii*), with crested wood fern and evergreen wood fern as parents.

Some of Fanny's other noteworthy collections include eight species of tick-trefoils (*Desmodium ciliare*, *D. cuspidatum*, *D. marilandicum*, *D. obtusum*, *D. paniculatum*, *D. perplexum*, *D. rotundifolium*, and *Hylodesmum nudiflorum*), seven bush-clovers (*Lespedeza angustifolia*, *L. capitata*, *L. hirta*, *L. procumbens*, *L. repens*, *L. violacea*, and *L. virginica*), six milkweeds (*Asclepias amplexicaulis*, *A. exaltata*, *A. incarnata* ssp. *pulchra*, *A. tuberosa*, *A. variegata*, and *A. verticillata*), and 19 orchids (Lamont 1995).

Fanny's last known plant collection was of the small whorled pogonia (*Isotria medeoloides*, Fig. 6), often considered to be the rarest orchid east of the Mississippi River and north of Florida. This species was one of the first orchids listed by the federal government under the Endangered Species Act. The Mulford specimen is in The William and Lynda Steere Herbarium of The New York Botanical Garden and has received a lot of attention through the years. The following extensive annotation is attached to the herbarium sheet: "One of the rarest of Eastern North American Orchids, *Isotria affinis* [= *I. medeoloides*], was collected on May 12th [1918] at



Figure 5. a) Fanny Mulford's collection of the rare glandular log fern (*Dryopteris* × *separabilis*) at BKL with b) a close-up of some label data.



Hempstead [Reservoir], Long Island, by Miss Harriet Mulford and her sister, who found two specimens, one with two blossoms and the other with one. Drawings

(Fig. 7) by Miss Coker and photographs by Miss Kittredge were made and compared with its closely related congener, *I. verticillata*, which was also found growing in the same locality and blossoming at the same time. Only a few stations are known for this species and it has only been found sparingly and at long intervals.”

Fanny Mulford's Legacy

Fanny Mulford lived during an exciting period in American botany when New York City served as an epicenter of activity. It was a time when new botanical institutions were created, new American territories were explored accompanied by exciting discoveries, new plant species were described, and new floras were published. It also was a time when the halls of science were filled with men, and women were denied the right to vote. Along with her closest friends, Fanny Mulford helped chip away at those divisive walls in her own quiet, reserved way.

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Figure 6. Double-flowered *Isotria medeoloides* (small whorled pogonia). Orange Co., NY. [Photo by E. Lamont, May 2015.]



Figure 7. Previously unpublished 1918 drawing by Miss Coker comparing *Isotria medeoloides* (small whorled pogonia, left) with *I. verticillata* (large whorled pogonia). The original illustration is attached to the Fanny & Harriet Mulford collection of *I. medeoloides* at The William and Lynda Steere Herbarium (NY), The New York Botanical Garden.

(Fanny Mumford continued from page 9)

The early 1900s was a time when the foundations were laid for environmental conservation. National parks were established along with societies dedicated to the protection and preservation of wildflowers, birds, and other wildlife; and from early on, Fanny Mulford was a local activist in this movement.

Also during this time much of Long Island's native flora was still intact, but signs were everywhere of biological and environmental degradation caused by human activities. Fanny Mulford's greatest contribution to future generations was her passion for documenting with herbarium collections the last remnants of Long Island's rarest flora. Her collections and her attention to detail continue to capture the awe and respect of modern botanists, just as they did 100 years ago.

Acknowledgments

Sincere appreciation is expressed to my niece Lindsay Sheridan for researching historical documents including census records, newspaper articles, and books, providing dates of births, deaths, and marriages, and reconstructing Fanny Mulford's family lineage; Susan Fraser and Steven Sinon (LuEsther T. Mertz Library, The New York Botanical Garden) for researching and providing information on Fanny Mulford's collaboration with Elizabeth Britton and her affiliation with the Wild Flower Preservation Society of America, The New York Botanical Garden, and the Torrey Botanical Club; Susan Pell and Rusty Russell (U.S. National Herbarium) for providing an image of the holotype of *Viola mulfordae*; Steve Rung (archivist, Hempstead Public Library) for providing information on Fanny Mulford's affiliation with Hempstead Library; James Fowler for providing the beautiful photographs of *Gentianopsis crinita*; and Barbara Thiers, Lisa Fruscella, and Thomas Zannoni (The William and Lynda Steere Herbarium, The New York Botanical Garden) for assistance in searching for specimens. This manuscript was improved thanks to thoughtful comments and suggestions from Larry Liddle.

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Orchids of New England and New York

A lecture presented by Eric Lamont and Tom Nelson
Sunday afternoon at 3:30 pm, March 13, 2016

Location: Arthur and Janet Ross Lecture Hall,
The New York Botanical Garden

Sponsored by the Torrey Botanical Society
and followed by its Annual Meeting and Banquet

See www.torreybotanical.org for details

Wild orchids are an important – and increasingly threatened – component of the flora of New England and New York, with 65 species and varieties occurring in the region. Lamont and Nelson have been searching out the often elusive remnant populations of wild orchids in the region in recent years and their research has resulted in the publication of a field guide, *Orchids of New England & New York* (Kollath+Stensaa, 2012). In this talk they will discuss the identifying characteristics, unique growth requirements and oftentimes unusual growth cycles of the incredibly varied species present in the region. This talk will also discuss some of the threats that wild orchids face as well as some conservation strategies. A slide show of Tom Nelson's images will accompany the talk.

Why No Portrait of Miss Mulford?

Margaret Conover, Newsletter Editor

Our cover article, by Eric Lamont, offers a glimpse of the world of botany over 100 years ago. Yet although Eric's research uncovered important biographical information about Miss Fanny Mulford, try as he might, he was unable to locate a single photographic image of her. With assistance of librarians and archivists, he searched the Mertz Library/NYBG, the Brooklyn Botanical Garden Library, and the archives of Hempstead Public Library and St. George's Episcopal Church. He sought help from Hofstra University Historian Natalie Naylor, author of "Women in Long Island's Past." He contacted the Photo Archives Center of Nassau Co. Dept. of Parks. Finally, he searched old newspaper records and tried Ancestry.com. If a portrait of Fanny Mulford exists, he hasn't been able to find it.



However, in the archives of the Torrey Botanical Society, I found these photographs of Torrey Botanical Club members on a field trip in 1895. Although Fanny did not join the club until 1896, it's entirely possible that she is among the unidentified "lady botanists" pictured here. And certainly the photo gives a sense of the field dress of the day.

FIELD TRIPS

MARCH 5, 2016 (SATURDAY) 10:00 AM to 1:00 PM

*Late Winter Botany Workshop: Buds, Bark, Berries, & More
At Muttontown Preserve*

Trip Leader: Lois Lindberg

Email: lalindberg3@optonline.net

This is an indoor-outdoor workshop. In spite of spring's approach, there is still plenty of time for some winter botany. Rid yourself of those confusing leaves and flowers to sharpen your botanical skills on buds and leaf scars. We will meet indoors at the Bill Paterson Nature Center to study the winter characteristics of some common deciduous trees and herbaceous plants. Weather permitting, we will head outdoors after the program for a closer look at bark textures, tree branching patterns, and remnants of last summer's wildflowers. Bring a hand lens, winter field guides, snack or lunch, and come prepared for a hike.

Directions: Bill Paterson Nature Center,
Muttontown Preserve

Muttontown Lane, East Norwich, NY

(LIBS monthly meeting location -

Contact the trip leader for further directions)

UPCOMING PROGRAMS

January and February: No meeting!

March 8, 2016* Tuesday, 7:30 PM

Eric Lamont: "Update on the Status of Long Island Orchids." The past and present status of Long Island's 37 orchid species will be discussed, including threats to remaining colonies and recent conservation efforts. Eric is president of LIBS and co-author of *Orchids of New England & New York*. He has published over 60 scientific papers including several on native orchids.

Location: Bill Paterson Nature Center, Muttontown Preserve, East Norwich

April 12, 2016* Tuesday, 7:30 PM

Larry Liddle: "Giant Unicellular Green Algae." This talk will cover their structure, ecology, and some cell biology. Several taxonomic groups of Green Algae (Chlorophyta) include diverse and often

morphologically complex genera, all of which are made up of single cells, i.e. no crosswalls are formed during development. In spite of this, their biology remarkably parallels that of multicellular organisms, and, because of this, some provide unique research tools to explore the basic nature of cells. Larry is Professor Emeritus, Southampton College, Long Island University. He earned an M.S. in Botany from the University of Chicago where he worked on the floral vascular anatomy of *Erica*. He has a Ph.D. in Marine Botany from the University of California, Santa Barbara, and also worked in the Department of Biology, University of Puerto Rico, Rio Piedras.

Location: Earth and Space Science Building,
Gil Hanson Room (Room 123),
Stony Brook University, Stony Brook

* Refreshments and informal talk begin at 7:30 p.m.
Formal meeting starts at 8:00 p.m.
Directions to Muttontown or Stony Brook: 516-354-6506